

### **REMARKS**

Claims 1-9, 11, 12, 14-22, 24, 25 and 27 are pending in this application, and stand rejected. Claims 10, 13, 23, 26 and 28 have been canceled hereinabove without prejudice to or disclaimer of the subject matter therein.

#### **Objection to the Abstract**

Withdrawal of the objection to the Abstract is respectfully requested in view of the amendment thereto set forth above.

#### **Section 112**

Claims 1-28 were rejected under 35 USC 112, second paragraph, as being indefinite on several bases. Of these claims, claims 1-9, 11, 12, 14-22, 24, 25 and 27 remain pending. The Examiner's remarks in connection with this rejection are addressed below.

Indefiniteness in the preamble of the claims was alleged. This has been addressed by deleting from the claims all preamble language but the language denoting a statutory class (e.g., method, system).

Indefiniteness was further alleged with regard to, e.g., claims 1, 15 and 28 on the basis of language referring to a "successful dialog." Claim 28 has been canceled. The alleged indefiniteness in claims 1 and 15 has been addressed in the above amendments by further defining a successful dialog as one proceeding to a stage consistent with a user's intent. An example is given in the present specification at page 5, line 24 to page 6, line 8, wherein a description is given of a dialog that results in an automated call that connects a caller with a requested number. By contrast, an unsuccessful dialog might be terminated before the user is able to accomplish his/her intention (e.g., as in the sample HANGUP dialog described page 6, lines 15-25) or might result in an automated task being performed that was not what the user wanted (e.g., as described at page 7 lines 13-28).

Indefiniteness was still further alleged with regard to claim 12, in connection with the claimed "storing" function. The Applicant respectfully disagrees with the Examiner's

apparent interpretation of claim 12. For example, the Examiner appears to interpret claim 12 as relating to "gather[ing] data for research." Claim 12 instead relates to a process pursuant to a real-time user dialog as described in, for example, FIG. 2 and associated text in the present specification at page 16, lines 28-31. Here, it is described how in "step 2200, the dialog predictor determines whether successful dialog with the user may be conducted based on both the *current* exchange 2 and previous exchange 1 retrieved from the dialog history database 165" (emphasis added).

Indefiniteness was still further alleged in claim 13. Claim 13 has been canceled.

Finally, indefiniteness was still further alleged in claim 14, specifically with regarding to the recognizing and providing steps recited therein. Claim 14 has been amended to omit the recognizing and providing steps.

In view of the foregoing, withdrawal of the rejection of claims 1-9, 11, 12, 14-22, 24, 25 and 27 under 35 USC 112, second paragraph is respectfully requested.

### Section 103

Claims 1, 3-11, 14, 15, 17-22 and 27 were rejected under 35 USC 103 as being unpatentable over Horvitz (U.S. 6,490,698, hereafter "Horvitz '698") in view of Horvitz (U.S. 6,421,655, hereafter "Horvitz '655"). Of the noted claims, claim-10 has been canceled.

The Applicant respectfully submits that the cited references do not support the asserted rejection, for at least the reason that the cited references do not teach or suggest "the probability is determined using dialog training data stored in a dialog training database, the dialog training data including at least one of dialog classification models and extracted dialog features" as recited in independent claims 1 and 15. In the cited references, only Bayesian networks for obtaining probabilities for decision making are disclosed. See, e.g., Horvitz '698 at col. 7, lines 66-67 and Horvitz '655 at col. 7, lines 31-42. The references are silent as to using dialog classification models or extracted dialog features as claimed.

Claims 3-9, 11, 14, 17-22 and 27 depend on one of claims 1 or 15 and consequently are likewise allowable over Horvitz '698 and Horvitz '655 for at least the reasons discussed in connection with claims 1 and 15. Withdrawal of the rejection of claims 1, 3-9, 11, 14, 15, 17-22 and 27 as unpatentable over Horvitz '698 and Horvitz '655 is therefore respectfully requested.

Claims 2, 16 and 28 were rejected under 35 USC 103 as being unpatentable over Horvitz ('698 and '655) as applied to claim 1, and further in view of Shipman (US 5,033,088). Claim 28 has been canceled. Claims 2 and 16 depend on claims 1 and 15 respectively and consequently include their respective recitations. Horvitz ('698 and '655) fail to support the asserted rejection of claims 1 and 15 as discussed above, and Shipman clearly does not remedy deficiencies in Horvitz ('698 and '655). For example, Shipman is similarly silent as to using dialog training data including at least one of dialog classification models and extracted dialog features as recited in claims 1 and 15. Accordingly, claims 2 and 16 are allowable over Horvitz ('698 and '655) in view of Shipman for at least the reasons discussed in connection with claims 1 and 15. Withdrawal of the rejection of claim 2 and 16 as being unpatentable over Horvitz ('698 and '655) in view of Shipman is therefore respectfully requested.

Claims 12, 13, 23, 24, 25 and 26 were rejected under 35 USC 103 as being unpatentable over Horvitz ('698 and '655) and further in view of Litman (Automatic Detection of Poor Speech Recognition at the Dialogue level) (hereinafter, "Litman"). Claims 13, 23 and 26 have been canceled.

Claims 12 and 25 are allowable over Horvitz ('698 and '655) and Litman for at least the reason that the latter fail to suggest "determining whether the probability of conducting a successful dialog with the user exceeds the first threshold using the first dialog exchange and the second dialog exchange" as recited. That is, there is no suggestion in Horvitz ('698 and '655) and Litman of using first and second dialog exchanges as recited in claims 12 and 25, where the first and second dialog exchanges

include first and second dialog outputs and first and second input communications of a user.

Claim 24 is allowable over Horvitz '698 and '655 along lines discussed previously in connection with claim 15, upon which claim 24 depends. As discussed, Horvitz ('698 and '655) do not suggest using dialog training data including at least one of dialog classification models and extracted dialog features as recited in independent claims 1 and 15. Litman only discloses automatic detection of poor speech recognition, and is silent, for example, at least as to determining whether a probability of conducting a successful dialog with a user exceeds a first threshold, as recited in claim 15. Accordingly, since claim 24 incorporates the features of claim 15 by dependency thereon, claim 24 is similarly allowable over Horvitz ('698 and '655) and Litman for at least the reasons discussed in connection with claim 15.

In view of the above, withdrawal of the rejection of claims 12, 24 and 25 as being unpatentable over Horvitz ('698 and '655) and Litman is respectfully requested.

#### Double Patenting

Claims 1-28 were further rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13, 15-27, 29 and 31 of co-pending application 09/712,194. This rejection is respectfully traversed. The Applicant notes that the scope of the pending claims may change further during prosecution, and that no indication of allowable subject matter has yet been offered by the Examiner.

The Applicant therefore submits that a terminal disclaimer will be filed to overcome the obviousness-type double patenting rejections, if warranted, when the Examiner indicates that, but for any obviousness-type double patenting rejections, the application is in condition for allowance.


Conclusion

In light of the above discussion, the Applicant respectfully submits that the present application is in all aspects in allowable condition, and earnestly solicits favorable reconsideration and early issuance of a Notice of Allowance.

The Examiner is invited to contact the undersigned at (202) 220-4323 to discuss any matter concerning this application. The Office is authorized to charge any fees related to this communication to Deposit Account No. 11-0600.

Respectfully submitted,

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